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ABSTRACT

Effects of the positioning of the child in the family and community were studied for 80 Portuguese students, ages 10 to 12 years, of differing race, social class, and gender. Positioning is considered to be a factor that reflects power and control relations in family hierarchical structures, and one that is particularly influenced by family communication. It was hypothesized that children with a high position in the family would have better academic achievement as well. Positioning in family and community was determined through student questionnaires. Children from advantaged social classes tend to have a more positive perception of their parents' status, and they tend to communicate with parents so that their personal attributes are more valued. Children with high positioning in the family have higher initial achievement in sciences than children with low positioning, but this difference loses significance after 2 years. Low positioning seems to have a more depressing effect on the initial achievement of girls than of boys, but effects of race were not separable from those of social class in this sample. Results suggest that school pedagogic practice may blur the effect of positioning on academic achievement. Five figures illustrate the discussion. (Contains 13 references.) (SLD)

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TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)"

# Children's Positioning in the Family and School Achievement

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## 1. Introduction

The study described in this paper is part of a broader research centred on the analysis of the influence of the family-school interaction on the achievement of socially differentiated children (social class, race, gender). This study is focused on the positioning of the child in the family/community. Since positioning is a sociological factor related with both family and school contexts, its analysis has the potential for a better understanding of the relation between students' social background and school achievement. The mediating influence of the school context on the relation between positioning and achievement is also part of the study.

Bernstein's theory of pedagogic discourse (1977, 1990; Domingos *et al*, 1986), which underlies the research, gave the basic concepts for constructing instruments and conceptualise the analyses. We shall start by presenting the context of the research. This will be followed by the description of the sample and methodology. The analysis of the data will be followed by their discussion and conclusion.

## 2. Context of the research

Positioning as used here is a concept related to class relations and their transmission, i. e. to the codes of cultural transmission. Family and school are crucial agencies of social control. They represent organizational structures whose internal relations translate realisations of the principle of power inherent to the social division of labour. However, although these realisations are limited by power relations (classification) created by class structure, they contain the possibility of change of those relations. Such possibility derives from the principles of communication (framing) which define the pedagogic relation. From this perspective, although family and school contexts reproduce the principles of power created by class structure they contain, through the form of their social relations (parents - children and teachers - students communication), the potential for changing those principles. The realisation of this potential can alter the class effect on positioning and this will give access of a larger number of children to a better achievement.

In this study, positioning is used as a factor which reflects power and control relations present in family hierarchical structures and which comes out at the level of the subject (the child) through the forms in which he/she sees himself/herself socially valued in the family/community. Within this perspective, we assumed that power and communication relations which characterize a given family structure reflect the

sociological position of the family within the class structure. Child's positioning as a member of a given family, would reflect the sociological position of the family but also power and control relations within family structure. Thus, we considered that child's positioning, consequence of primary socialising processes, should be analysed in two dimensions which, although inter-related, represent different forms taken by that positioning. The first is the positioning of the child in the community which was taken as reflecting the form in which he/she positions the family in the social hierarchy created by class structure. The second is the positioning of the child in the family which reflects the social relations which characterise family hierarchical structure.

If we consider that the form in which the child socially positions his/her family translates his/her perception of the academic and socio-economic status of parents in the social division of labour of physical and discursive resources in society. If we also consider that status is transmitted and reinforced by the cultural and socio-economic representations which define the context of which the family is part, we can expect that children coming from families of a different cultural and socio-economic level have different perceptions about their parents' status and as a consequence they position differentially their families. On the other hand, if we consider that the hierarchical position of the family conditions its social relations within the community and that those social relations are acquired by children in the process of primary socialization, we can also expect that children from different family contexts will show specific social behaviours which will be a consequence of differential positionings in the community.

If we now consider the positioning of the child in the family, we can think that children who have with their fathers/mothers communication relations of weak framing will have a high positioning in the family. Children who relate with their fathers/mothers through communication principles of strong framing will have a low positioning in the family. In fact, the family context can be seen as an hierarchical structure which translates a given social division of labour within the family, i. e. as a social structure in which parents and children have specific hierarchical positions. Different social roles within the family structure are primarily determined by the higher status of fathers/mothers relatively to children, but the way in which these roles are transmitted in the intra-familial communication, i. e. the form of realisation of power relations between parents and children, may be determinant of children's positioning in relation to fathers/mothers. In other words, children's positioning in the family is particularly influenced by the principles of communication through which are realised power relations underlying the social structure of their family context. If power relations in the family (consequence of economic, academic, gender, age status of parents and

children) are realised through hierarchical principles of weak framing there will be an open space of communication in which the personal attributes of the child will be valued. If, for this reason, the child feels himself/herself valued in the family, he/she will assume a high positioning which may show not only in his/her relation with fathers/mothers but in his/her relation with other subjects whose hierarchical position is higher than his/her own. On the contrary, if power relations in the family are realised through hierarchical principles of strong framing, parents-children communication will tend to be unilateral, child's personal attributes will be minimized and the child's positioning in relation to parents and to other subjects of higher status will tend to be low.

When studying the relation between child's positioning in the family/community and school achievement we followed the hypothesis that children who show high positioning in both the family and the community will have better achievement than those who show low positioning. In this relation, social class (and for similar reasons race and gender) intervenes as a factor whose influence on the primary socialising context determines child's positioning and consequently achievement in school. In the hypothesis it is assumed that there is a relation between the positioning in the family/community and the positioning in the school in which children with high positioning in the family/community will may initially assume high positioning in the school context.

Starting from the idea that it is within the relation family-school that the child's positioning should be taken as a factor of success/failure at school, the research was broadened to analise the mediating effect of the school context characteristics. This effect was studied in terms of the influence of different pedagogic practices on the relation between child's positioning in primary socialising contexts and his/her achievement. In taking pedagogic practice as a school variable, we considered the characteristics of differential pedagogic practices in terms of the social relations present in the hierarchical structure which characterises each practice (see § 4.1). Since the social context of the classroom, determined by differential characteristics of the pedagogic practices, translated differential social relations teacher-student (and student-student), we hypothesised that, according to the nature of that context, the differential positioning primarily acquired by the child in the primary socialising context could be reinforced or, on the contrary, be blurred.

## 3. Sample

The sample was made up of 80 children distributed by four classes of a preparatory school of the suburban area of Lisbon. Each class, with the same number of students, was heterogeneous in terms of social class, race, gender and age ($10^{-}$ - $12^{+}$) and was submitted, in the subject of Natural Sciences, to one of three distinct modalities of pedagogic practice. All classes were taught by the same teacher (female). On the basis of the information given in the registration file of each child, the sample was organized in a way that all social groups were equally represented in each one of the classes. Further information obtained through questionnaires and interviews to the families led to some change in the sample distribution although the heterogeneity referred was kept. The study took place during two years (5th and 6th years of schooling).

A pilot sample was also selected made up of eighteen students, nine white upper middle class and nine white and black lower working class. These students were following the same level of schooling of the experimental sample.

## 4. Methodology

### 4.1 Variables

The variables respect to sociological factors of both family and school contexts. Variables related to the family context are social class, race, gender and positioning in family and community. Variables related to the school context are modality of pedagogic practice in sciences and achievement in two types of cognitive competencies.

Social class (taken as a nominal concept) was defined on the basis of parents' academic qualifications and occupations. The data were obtained through questionnaires given to fathers and mothers in the presence of the researchers. From the four measures of social class a composite index was created (FSEL - family socio--economic level) on a 1-4 scale[1]. Race overlapped with social class, black children being part of the lowest social class and white children part of social levels 2, 3, 4. Gender is identified, in the analyses by $G_1$ (girls) and $G_2$ (boys).

Four variables defined child's positioning in the family/community - child's positioning in the family, in relation to mother (PFm) and in relation to father (PFf) and

child's positioning in the community according to social status of the mother (PCm) and father (PCf). For some analyses child's positioning in the family/community was taken as only one variable called child's positioning in the family/community context (PFC). Data were obtained through direct questionnaires given to students during the third term of the 5th year of schooling (see § 4.2).

Pedagogic practices were implemented according to a previous theoretical definition (Morais and Neves, 1993 a). This definition intended to guide the teacher in implementing three pedagogic practices ($P_1$, $P_2$, $P_3$) which, within a sociological perspective, would be essentially different in the control of the transmitter (and the acquirer) over the learning process. Broadly the pedagogic practices differed in the principles which regulate transmission-acquisition of science knowledge and competencies (instructional discourse) and in the principles which regulate conduct and interaction in the classroom (regulative discourse). The definition of the pedagogic practices focused on the many aspects of the relations between spaces, discourses and subjects and used Bernstein's concepts of classification and framing to define power and control relations present in the context of each pedagogic practice. Shortly, the differentiation of the practices translates an increasing degree of control of the teacher over the teaching-learning process. Pedagogic practice $P_3$ was the practice with stronger framings on discursive rules (greater control of the transmitter on the selection, sequence, pacing, evaluation criteria) and on hierarchical rules (fundamentally positional control). $P_1$ was the practice with weakest framing on those rules, i. e. the transmitter had lesser control on the process of learning of knowledges and competencies and there were fundamentally inter-personal modes of control. Pedagogic practice $P_2$ was an intermediate practice, closer to $P_1$ in some aspects (e. g. hierarchical rules) and to $P_3$ in some others (e. g. evaluation criteria). The strength of the classification between spaces increased from $P_1$ to $P_3$.

The theoretical characterisation of the three pedagogic practices, was complemented by specific indicators for implementation in the classroom. The practices as they really occurred were characterized by other researchers in both the instructional and the regulative context (Fontinhas and Morais, 1993 a; Antunes and Morais, 1993 a). The characterisation showed that the sharp distinction intended for the three practices was somewhat blurred, although they kept different in many important aspects.

Students of two classes attended $P_2$, students of a third class attended $P_1$ and students of a fourth class attended $P_3$. School achievement was measured through

tests made by the teacher with the help of the researchers and assessed two types of competencies - simple cognitive competencies (CS) and complex cognitive competencies (CC)[2]. Students were given two tests in each one of the three terms of the school year. This gave six measures corresponding to six terms. For the purpose of this study we considered initial achievement (first term of 5th year) and final achievement (third term of 6th year). Marks were given in a 0-100 scale.

#### 4.2 Measuring of positioning

Two separate questionnaires were constructed to measure child's positioning in the family and in the community. Both questionnaires were given to children in two forms, one referring to father and another to mother.

The questionnaire to measure child's positioning in the community was made up of questions which could give his/her perception of the academic and occupational status of his/her father and mother[3]. The questionnaire on the positioning of the child in the family contained items related with the space of communication which is given to children in their relations with the father and the mother[4].

The questionnaires were previously piloted with the pilot sample. On the basis of the piloting some items were altered in order to get a better understanding of the questions from the part of the children. Whenever the items had not enough discriminatory power or showed not to be a good measure of positioning they were discarded. In the piloting, the questionnaire on child's positioning in the family was also given to parents in order to check the degree of consistency of the answers given by children and parents.

The data obtained were translated in a 1-4 scale giving an increasing degree of positioning. For some statistical analyses the scale was condensed in two categories: low and high positioning. Statistical analyses of the data were done through a standardized program for Macintosh (Statview 15[+]) and a variance analysis was carried out. We complemented this analysis with descriptive analyses of the data.

## 5. Analysis and interpretation of data

### 5.1 Positioning in the family/community and relation with students' social background

In the analyses of the relation between social group and the two dimensions of positioning - positioning of the child in the community (PCm and PCf) and positioning of the child in the family (PFm and PFf) - we considered the cultural and socio-economic level of the family as the index of social class (FSEL). Figure 1 shows the data on the relations between social class and positioning variables.

(insert figure 1 about here)

If we focus on the positioning of the child in the community, the analysis of the data shows that the means for PCf and PCm increase with the increase of the family socio-economic level. These relations are statistically significant ($p \leq .02$ for the relation FSEL/PCf and $p \leq .0001$ for the relation FSEL/PCm). The data suggest that the socio-economic level of the family interferes in the perception children have on fathers and mothers status in the social hierarchy. The data then support the hypothesis that children from socially advantaged families acquire in the context of primary socialization a higher positioning than children from socially disadvantaged families.

From the data of figure 1 it is also possible to see that in all social classes children seem to give a higher status to fathers than to mothers. The data also suggest a less sharp demarcation between father's and mother's status within the higher social group and a sharper demarcation in other groups, particularly in the most disadvantaged group. This demarcation tends then to be related with cultural and socio-economic level.

Since the lowest socio-economic level (group 1) is largely constituted by black fathers/mothers (only one mother is white) the variable race interferes in the results obtained for group 1. However, since this group is a group with a double disadvantage in terms of social prestige, it can be taken as a group which represents the situation of the most disadvantaged children in the context of this study. We then considered that the results shown in the figure should be interpreted as representing the influence of family status on child's positioning in the community.

If we now centre on child's positioning in the family, the data show that, in general, means for PFm and PFf increase with the increase of FSEL. The data then support the hypothesis that socially advantaged children show a higher positioning in the family when compared to disadvantaged children. The level of statistical significance is very high ($p \leq .001$ for FSEL/PFf and $p \leq .0002$ for FSEL/PFm) suggesting the existence, within the families, of a correspondence between relations of weaker framing between children and fathers/mothers in the socially advantaged groups and relations of stronger framing in the socially disadvantaged groups.

The fact that in students as a whole and within each social level the means for PFm are higher than for PFf, suggests that mothers relatively to fathers tend to maintain more open relations with their children. This supports the idea of a patriarchal structure in the families. If are the mothers who keep a more open space of communication with children, this may mean that fathers delegate in women the main role of children's primary socialization. This fact associated to the higher status accorded to fathers relatively to mothers may show that home differentiation based on gender status is a characteristic of the social context of families in general. On the other hand, and although there is not in the students as a whole a significant difference in the social relations they maintain with fathers and mothers it is in social group 1 that such relations are less open with fathers than with mothers. Since it was in this group that a higher differentiation between PCf and PCm was found, those data seem to reinforce the idea of the existence in these families of a more marked patriarchal structure.

When students' gender was taken as a mediating variable in the relation between social class and positioning in the community we obtained the results shown in figure 2.

(insert figure 2 about here)

The data show, in general, a similar pattern to the pattern shown in the relation between social class and positioning, i. e. both boys and girls show higher positioning when they are part of advantaged families.

On the other hand, the analysis between gender and positioning in the

community shows that both boys and girls tend to attribute higher social status to fathers than to mothers. For girls, PCf's mean is 2.73 and PCm's mean is 2.17. For boys, PCf's mean is 2.59 and PCm's mean is 2.08. However, for each social class separately the relation between gender and positioning (as measured in the study) does not always follow the same pattern. This fact led again to the question of the differential valuing accorded by children to father's and mother's status. In fact, the analysis of the results in terms of social class shows that for social groups 1 and 4 the higher valuing of father's status compared to mother's is more marked for girls than for boys. For groups 2 and 3 differential valuing is similar for boys and girls. On the other hand, it is in the lowest social class (group 1) that father's and mother's status, as seen by children, is more marked for both boys and girls. In the highest social class (group 4), and for boys, differences of status disappear.

When gender was taken as a mediating variable of the relation between social class and child's positioning in the family, we could see that communication relations of mothers and fathers with their children varied with child's gender. Figure 3 presents the results of this analysis.

(insert figure 3 about here)

The results show that:

(a) When children are taken as a whole, girls relatively to boys, tend to keep more open communication relations (weaker framing) with their mothers - PFm's mean is 2.85 for girls and 2.56 for boys. On the contrary, communication relations with fathers are characterized by weaker framing for boys than for girls - PFf's mean is 2.54 for boys and 2.35 for girls. Further, whereas boys have a similar relation with fathers and mothers, girls have a weaker framing relation with mothers than with fathers.

(b) When social groups are taken separately, relations with fathers follow the above trend for groups 2, 3 and 4, i. e., boys keep weaker framing relations with fathers than girls (group 2 - 2.70 for boys and 2.54 for girls; group 3 - 2.63 for boys and 2.07 for girls; group 4 - 3.20 for boys and 2.78 for girls). There is an inversion for group 1, where girls seem to keep weaker framing relations with fathers than boys (PFf: 1.75 for girls and 1.33 for boys).

(c) The general trend for the relations with mothers which showed that girls keep weaker framing relations with mothers than boys holds only for social group 2; for other groups boys and girls show a similar positioning.

(d) In their differential relations with fathers and mothers, girls of all social groups show the general pattern, i. e., keep a weaker framing relation with their mothers, than with their fathers. Boys reveal different patterns according to social group. There is a more open relation with the mother for groups 1 and 4 and with the father for group 2; for group 3 the relation is similar.

These data support to a certain extent the hypothesis that, in general, there is in the families a legitimation of gender status. The communication relations of children and parents come out as indicators of the family structure according to gender differentiation.

### 5.2 Positioning in family/community, achievement and pedagogic practice

We start with the hypothesis that the higher child's positioning in the family/community the higher his/her school achievement.

In the analysis of the relation between positioning in the family/community (PFC) and achievement in sciences, we compared initial and final cognitive achievement obtained by students with different positioning. This procedure was used on the assumption that if final achievement (after two years of schooling) was higher than initial achievement for children with low positioning this would mean that the context of secondary socialization had minimized the depressive effect of that attribute on school success of socially disadvantaged children.

To complement the analysis, we used school's pedagogic practice as a mediating variable in the relation between PFC and achievement in sciences. The objective was to obtain data on the influence of pedagogic practice on achievement of students differentially positioned in the family/community.

Figure 4 shows the data obtained. PFCl and PFCh are the children who showed respectively low and high positioning in the family/community; 1 and 2 refer respectively to the first and the second moments of evaluation (see § 4.1).

(insert figure 4 about here)

Let us take first the mean of achievement obtained by students with different positioning in the three pedagogic practices taken together.

The data show that students with high PFC (PFCh) show higher initial achievement in both competencies (CS and CC) than students with low PFC (PFCl). Since we had seen that there was a significant relation between FSEL and PFC ($p \leq .0001$) and that the higher the FSEL the higher the initial achievement in both competencies ($p \leq .0001$ for FSEL/CS and $p \leq .01$ for FSEL/CC) it was possible to establish a causal relation FSEL - PFC - achievement. This relation suggests that the positioning acquired by the child in the primary socialising context (family/community) can be taken as a factor which explains the influence of social class on students' differential achievement[5]. However, if we consider the initial difference of achievement between students differentially positioned, it is possible to see that the difference blurs after two years of schooling as a consequence of a more positive evolution of students with low positioning. These data are supported by the results of variance analysis, which showed that, although there was a significant relation between PFC and initial achievement ($p \leq .0002$ for CS and $p \leq .02$ for CC), that relation looses significance when final achievement is considered ($p \leq .07$ for CS and for CC).

If we now analyse in the figure the effect of the pedagogic practice on the achievement of students differentially positioned in the family/community it is possible to think that the practice acts as a mediating variable in that relation. Initially it is pedagogic practice $P_2$ which, relatively to other practices, is more favourable to the achievement of students with low positioning. It is also in this practice that differences between the two groups of students are less accentuated (for their achievement in complex competencies). However, after two years of schooling, $P_1$ and $P_3$ show a higher evolution of low positioned students and a narrowing of the gap between the two groups of students. Such narrowing was more evident for simple competencies in $P_3$ and for complex competencies in $P_1$.

Although the data on the influence of pedagogic practices only show trends, they give suggestions about the importance of the social context of the classroom on narrowing school differences between groups of students socially distinct (in this case students differentially positioned in the family/community).

We had seen that girls relatively to boys had lower initial achievement in both competencies[6]. We had also seen that there was a tendency for the legitimation of a familial hierarchical structure based on gender status. On the basis of this knowledge we carried out an analysis in which students' gender was taken as a mediating variable in the relation between child's positioning in the family/community and his/her science achievement. We intended to see the extent to which the social context of the science class had blurred the influence of the gender status of girls.

Data on the evolution of achievement in simple and complex competencies of boys and girls differentially positioned in the family/community are shown in figure 5.

(insert figure 5 about here)

The results for achievement in simple competencies (CS) suggest that initial achievement of girls is more influenced by their positioning than boys' - girls with low positioning (PFCl) have lower achievement than those with high positioning (PFCh) whereas for boys this difference is much slighter. These data support the idea that, in the school, girls tend to assume initially a social role shaped by the regulative principle of the gender status. Final achievement in the same competencies show significant changes for girls with low positioning. The comparison of final and initial achievement show great improvement for girls with low positioning but slight improvement for girls highly positioned. Boys of both groups slightly decreased their achievement. These data show that the increase of achievement in simple competencies of low positioned children is caused by girls and this suggests that the school may have contributed to change the social role initially acquired in the family.

For achievement in complex competencies (CC) there is also a narrowing of the gap between boys and girls during the two years of schooling. This narrowing is a consequence of the improvement of low positioned girls and also, although slight, of high positioned girls.

Summarising, the data in the graph show that:

(a) The initial difference of achievement between the two groups of girls (low and high positioned) decreases after two years of schooling. There is even a similar final achievement in complex competencies for the two groups.

(b) The pattern for boys shows that the difference of achievement between the two groups tends to keep similar, particularly in complex competencies.

(c) Girls of both groups (high and low positioned), who initially had lower achievement than boys after two years of schooling show an achievement in simple competencies slightly higher than boys. This pattern is kept for complex competencies and low positioned girls. Achievement in these competencies, of high positioned girls also improves and after two years of schooling they are closer to boys.

These results complement former analyses and reinforce the idea that child's positioning in the family/community interferes in school achievement and that girls are more sensitive to that influence than boys.

## 6. Discussion and conclusion

Child's positioning as an attribute related with the context of primary socialization and reflecting both children's perception of occupational and educational status of parents and communication relations between children and parents was in this study the object of several analyses. These analyses suggested the existence of a significant relation between social class and child's positioning. Children from advantaged social classes tend to show a more positive perception of parents' status and keep with parents communication relations in which their personal attributes are more valued. An opposite pattern showed up for disadvantaged children. In other words, are socially advantaged children in terms of social class/race who show higher positioning. It was also possible to see a significant relation between positioning and initial achievement. Children with high positioning in the family/community have higher initial achievement in sciences than children with low positioning, in both simple and complex competencies. However, when we considered final achievement (after two years of schooling), we also show that such relation looses significance. These data point out to the influence of the social context of school on achievement of differentially positioned children.

Data obtained in the various analyses show the existence of a relation "social class - positioning in the family/community - science achievement", suggesting that positioning acquired by the child in the context of primary socialization is a sociological factor which can explain the influence of social class in students initial differential achievement. The same kind of interpretation is applicable to the relations

between race and school achievement. However, in the case of race the study does not allow definite conclusions since black students were part of the lowest socio-economic level of the sample and this led to the simultaneous acting of two variables. We saw how the double disadvantage of this group, in terms of social hierarchy, reflects on how children feel socially devaluated (low positioning group) and how this fact may in part explain the higher school failure shown by those children.

We observed that low positioning in the family/community seems to have, in general, a more depressing effect on girls' initial achievement than on boys'. An explanatory hypothesis to this trend is that children tend to assume initially in the school a social role shaped by the regulative principle of gender status. We had seen that children tend to attribute higher social status to fathers than to mothers and that such tendency is in general more evident for girls than for boys. On the other hand, we saw that children, in general, tend to maintain weaker framed communicational relations with mothers than with fathers. We saw also that girls relatively to boys have weaker framed relations with mothers whereas boys have weaker relations with fathers. These trends give some support to the hypothesis of the existence of a gender regulative principle in families. This principle may condition the social role initially assumed by girls and boys in the school and this may constitute a reason for the initial achievement in relation to gender. In fact, another study within the broader research (Antunes and Morais, 1993 b), showed that although girls as compared to boys showed a higher positioning in the school in the final of the research, that positioning was closer in an intermediate stage of the research (third term of 5th year). Although we have not data on children's positioning in the school in the beginning of the studies, that trend lead us to think that girls were likely to have lower initial positioning than boys. This would be in accordance with the above hypothesis on the relation between family/community positioning and school achievement.

In the study we also analysed the influence of the school context in the relation between child's positioning in the family/community and science achievement. The results obtained point (as a trend) to the possibility of the school pedagogic practice to blur the effect of positioning (primarily acquired in the family/community) on school achievement. In general, there was a narrowing of the gap initially existent between differentially positioned children after two years of schooling. Children with low positioning in the family/community, particularly the girls, show in general a significant improvement in achievement in both types of competencies. We also saw that from the three pedagogic practices implemented in the science class, the strongest framed practice ($P_3$) showed to be, after two years, the most favourable to the development of

simple cognitive competencies and approximated the achievement of differentially positioned students. For complex cognitive competencies, the practice which approximated the achievement of the two groups of students (low and high positioned) was the practice which, from the three, was characterised by relatively weaker framings ($P_1$).

However, pedagogic practice $P_2$ was initially the most favourable to low positioned students (in both competencies, simple and complex). An explanatory hypothesis would be that practice $P_2$, relatively to $P_1$, had the advantage of making more explicit the evaluation criteria and, relatively to $P_3$, the advantage of more open relations of communication for both teacher-students and students of differentiated social groups. It is possible that this kind of relations had the potential to change the low positioning which children acquire in the primary socialising context and that that change has influenced their initial achievement. If, within similar relations, $P_1$ was not initially as favourable as practice $P_2$ this may be a consequence of students have had difficulties, in the beginning, to answer adequately to a pedagogic context in which the criteria of evaluation were little explicit (as with $P_1$). It may also have been a consequence of students with low positioning being in general socialised at home through practices with strong framings[7], $P_1$ creating relatively to $P_2$ a greater discontinuity between family and school contexts. We can therefore think that the more positive evolution in $P_1$ relatively to $P_2$ in complex competencies was a consequence of the open relations of communication in $P_1$ (which also characterise $P_2$) *together* with the fact that students had overcome, after two years of schooling, the initial difficulties consequence of the higher descontinuity in $P_1$ between family and school socialising processes. The more positive evolution in $P_3$ in simple competencies suggests that, for these competencies, the more open relations of communication in the classroom are less important than the explicating of the evaluation criteria.

Data obtained in this study support the idea that school pedagogic practice influences students' achievement in different types of cognitive competencies of students differentially positioned in the family/community. However, the study does not allow a definite conclusion about the practice which narrows the gap between the two groups of students increasing the achievement of the disadvantaged group without decreasing the achievement of children with high positioning.

However, the study suggests that specific characteristics of a pedagogic practice may be favourable to the blurring of differential positioning. Although some of these characteristics are suggested by other studies carried out with the same sample (e. g.

Morais *et al*, 1993 c, Fontinhas *et al*, 1993 b), only future research can indicate the pedagogic practice(s) more adequate to the success of students with low positioning. Data from this study make possible to hypothesise that the positive evolution of girls relatively to boys, within the low positioned children, was a consequence of the teacher being female. The fact that girls relatively to boys kept weaker framing relations with their mothers seemed to have passed through the classroom so that girls benefitiated more from having a female teacher.

We do not want to ignore with this study that differential positioning is the result of multiple factors, associated with both primary socialisation and school social context. However some contribution was given to broader studies, pointing out to the importance of considering an attribute of the child associated with the context of primary socialisation but influenced by the school which seems to influence achievement of socially differentiated students.

Although child's positioning in the family/community seems to mediate the relation between social group and school achievement, giving some explanation to the discontinuity/continuity between primary and secondary socialising contexts, the interpretations made should not be taken as generalisations. They originated explanatory hypothesis which should be considered within the limitations of the study. Within these limitations is the fact that child's positioning was measured in a period of the research when some influence of the pedagogic practice on positioning could already have occurred.

It was possible to support the idea that causes for school achievement do not derive only from sociological characteristics of the family. In fact, the attributes acquired by the child in the process of primary socialization may only constitute determinant factors of his/her school achievement if pedagogic practices implemented in the school create contexts of teacher-student and student-student interaction which do not take into consideration differential attributes of students.

**Notes**

1. Within this scale, 1 includes illiterate and unskilled workers and 4 includes self employed or salaried professionals who completed secondary school or higher degrees.

2. Simple cognitive competencies refer to knowledge whose learning requires a low level of abstraction and complex cognitive competencies to knowledge requiring a high level of abstraction. Shortly, and

referring to science learning, the first group of competencies includes memorising and understanding of concepts at the lowest level and the second group includes understanding of concepts at the highest level and also application of concepts to new situations (involving relatively complex processes of analysis, synthesis and evaluation).

3. Examples of items of the questionnaire on child's positioning in the community are the following statements: "I would like to have more studies than my father (my mother)", "My father (my mother) has an important position in the place where he (she) works", "My father (my mother) earns little money".

4. Examples of items of the questionnaire on child's positioning in the family are the following statements: "When your mother (your father) does something you think it is wrong you tell her (him)", "When you do right your mother (your father) tells you".

5. In the broader research where this study is included we obtained results which suggest the existence of a statistically significant relation between child's positioning in the family/community and his/her initial positioning in the school in relation to the science teacher ($p \leq .0004$).

6. Statistically significant values were found for the relation between gender and initial achievement only ($p \leq .002$ for CS and $p \leq .02$ for CC). This relation lost significance for final achievement in both competencies ($p \leq .62$ for CS and $p \leq .28$ for CC).

7. Results obtained in another study carried out with the same sample (Neves and Morais, 1993) suggest that socially disadvantaged children are in general socialised at home through practices characterised by strong framings.

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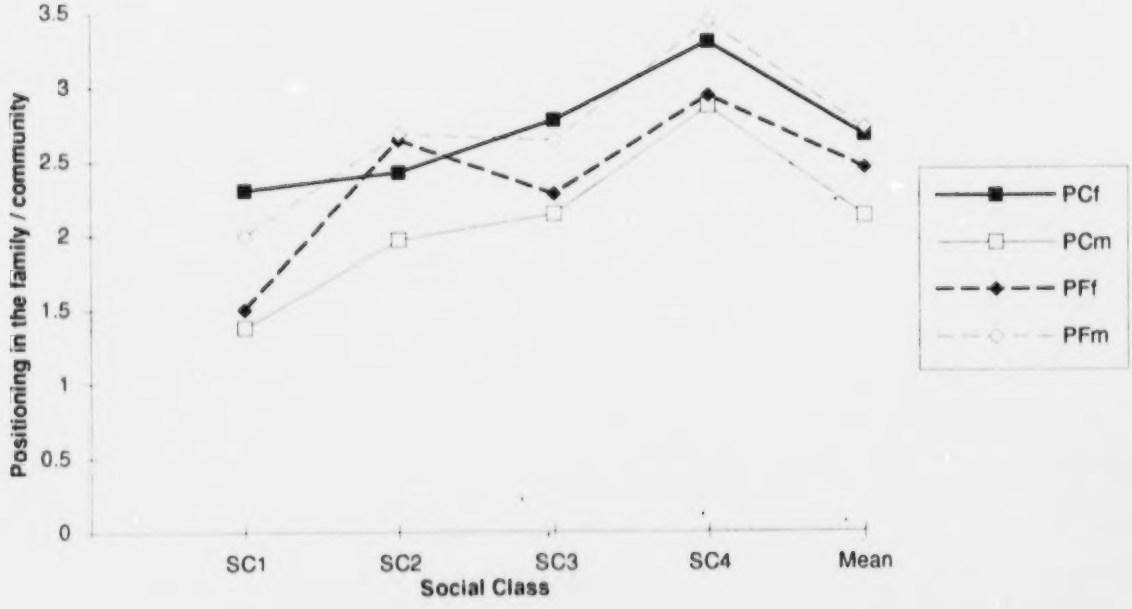


Figure 1 - *Relation between social class and child's positioning in the family/community.*

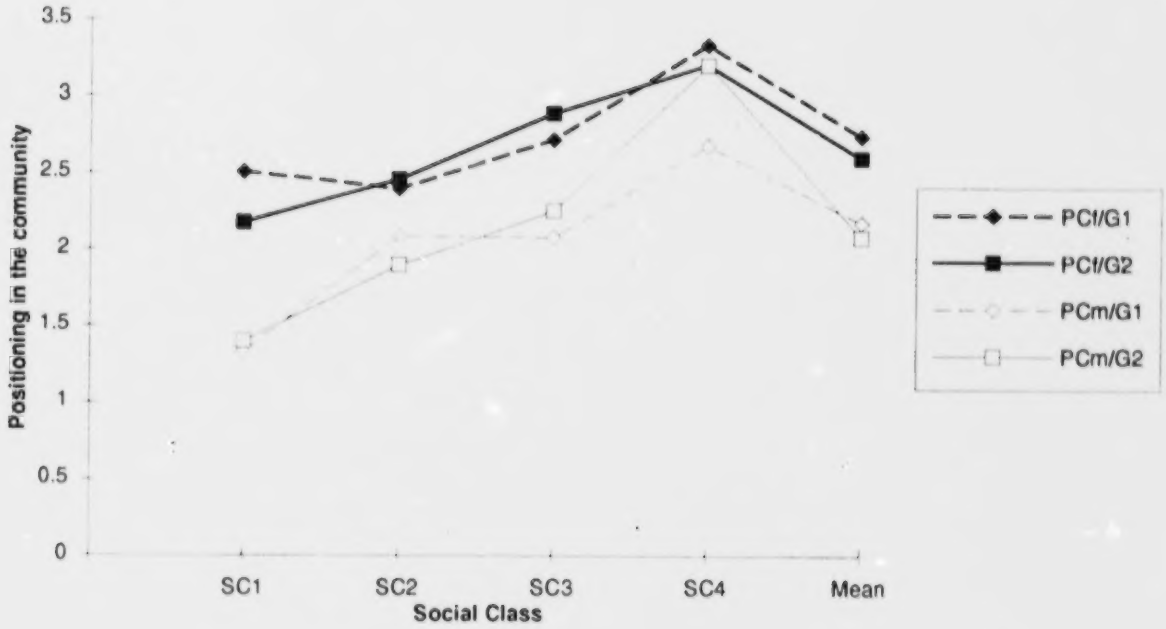


Figure 2 - *Relation between social class and positioning in the community of gender differentiated children.*

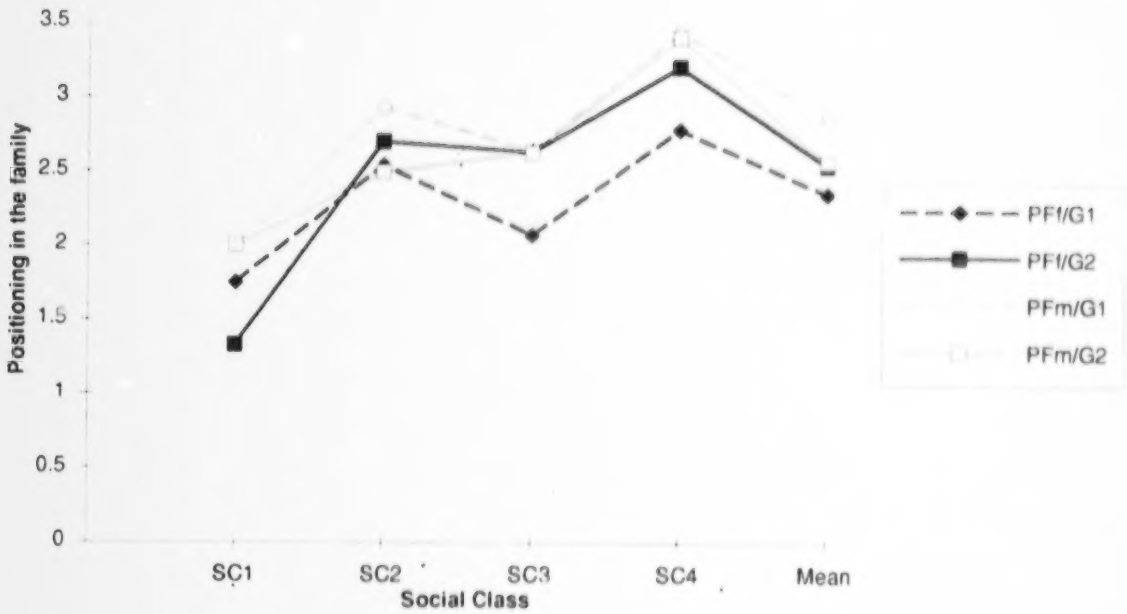


Figure 3 - *Relation between social class and positioning in the family of gender differentiated children.*

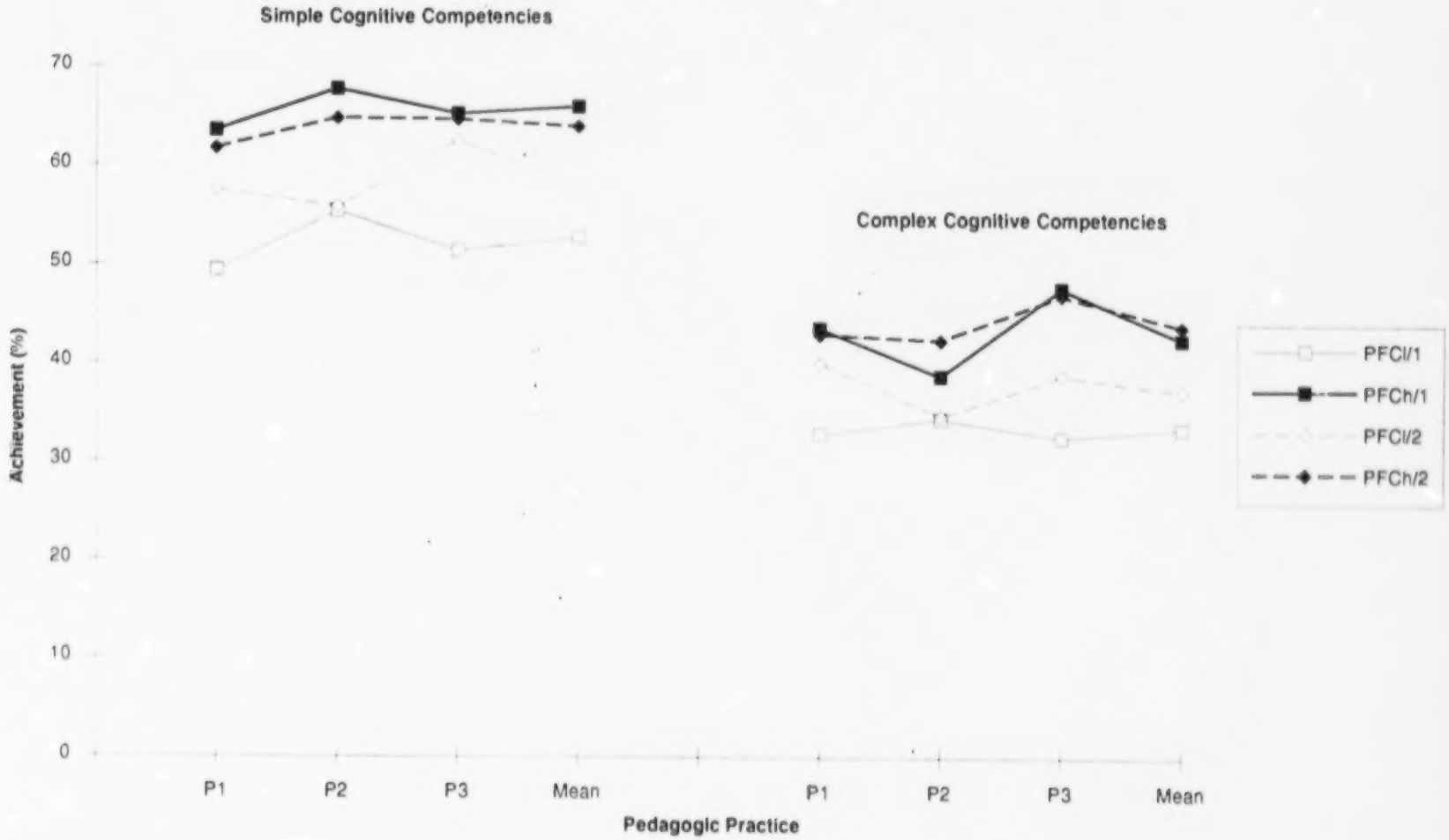


Figure 4 - *Relation between pedagogic practice and cognitive achievement of differentially positioned children.*

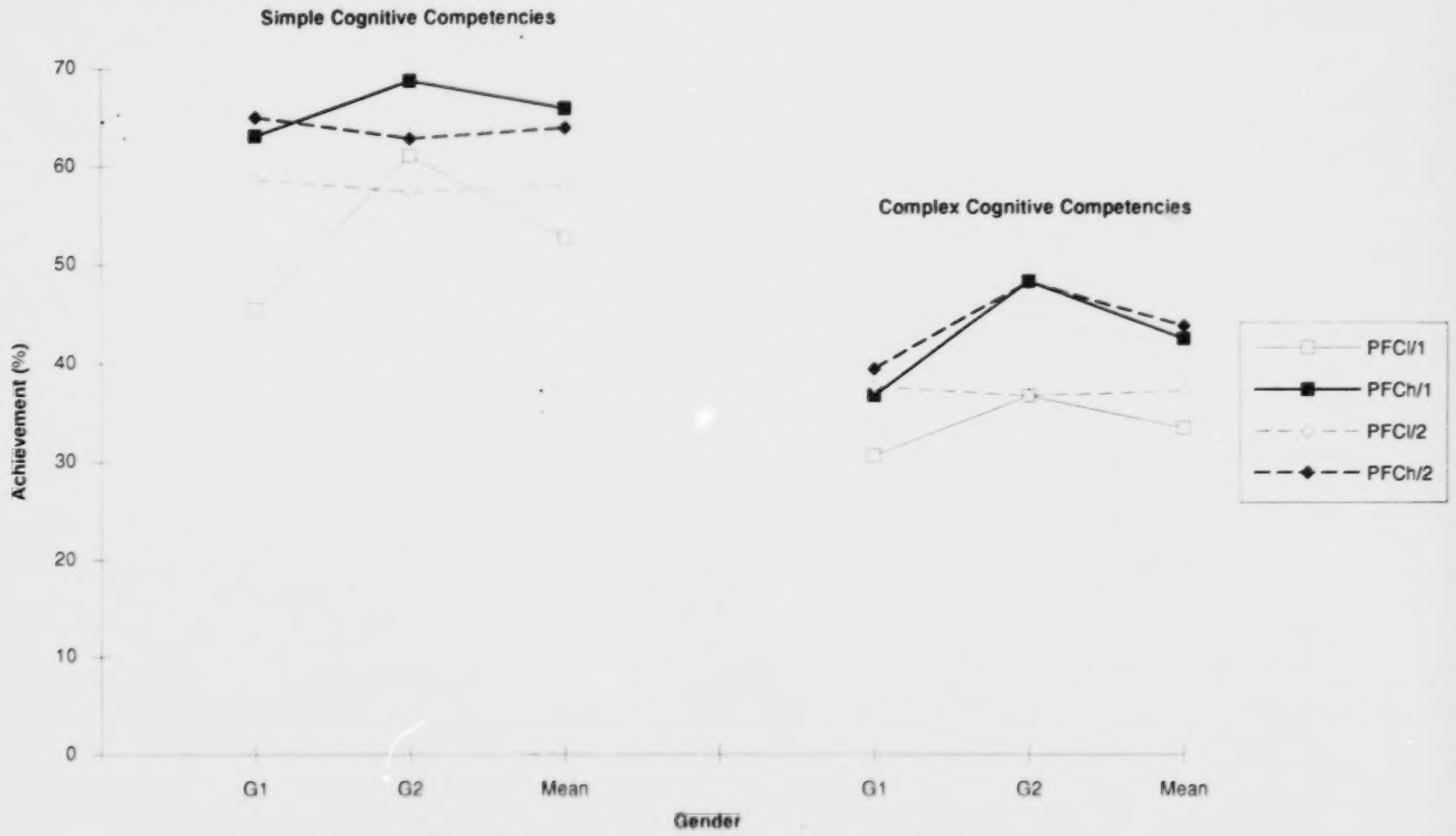


Figure 5 - *Relation between gender and cognitive achievement of differentially positioned children.*